

AMENDMENTS TO CLAIMS

This listing of claims will replace all prior versions or listings of claims in this Application. In response to the Examiner's note that the amendment of February 27, 2006 fails to comply with 37 CFR 1.121, Applicants amendments reflect the Claims as submitted in the Response and Amendment filed April 29, 2005.

1. (Currently Amended) A vulcanized rubber mixture ~~Rubber mixtures~~ comprising vulcanized uncrosslinked, double-bond-containing rubbers (A), crosslinked rubber particles (B), multifunctional isocyanates (C), ~~and a vulcanizing agent~~ wherein the amount of component (B) in the mixture is from 1 to 150 parts by weight and the amount of multifunctional isocyanates (C) is from 1 to 100 parts by weight, in each case based on 100 parts by weight (phr) of the rubber component (A) and wherein said crosslinked rubber particles (B) have particle diameters of from 5 to 1000 nm and swelling indices in toluene of from 1 to 15 and wherein the gel content of the rubber particles (B) is from 80 to 100 wt.%.

2. (Original) Rubber mixtures according to Claim 1, wherein said crosslinked rubber particles (B) are present in from 5 to 100 parts by weight and said multifunctional isocyanates (C) are present in from 3 to 50 parts by weight, in each case based on 100 parts by weight of the rubber component (A).

3. Cancelled.

4. (Original) Rubber mixtures according to Claim 1, wherein said multifunctional isocyanates (C) contain isocyanates having at least two isocyanate groups in the molecule.

5. (Original) Rubber mixtures according to Claim 4, wherein said multifunctional isocyanates (C) are selected from the group consisting of hexamethylene diisocyanate, 1-isocyanato-3-(isocyanatomethyl)-3,5,5-

trimethylcyclohexane, 2,4- and 2,6-diisocyanatotoluene as well as the corresponding technical isomeric mixture, diphenylmethane diisocyanates, diphenylmethane 4,4'-diisocyanate, diphenylmethane 2,4'-diisocyanate, diphenylmethane 2,2'-diisocyanate as well as the corresponding technical isomeric mixtures, naphthalene 1,5-diisocyanate and 4,4',4''-triisocyanatotriphenylmethane.

6. (Previously Presented) Rubber mixtures according to Claim 1, wherein said uncrosslinked, double-bond-containing rubbers (A) are selected from the group consisting of natural rubber, styrene/butadiene rubber, polybutadiene rubber, nitrile rubber, butyl rubber, brominated isobutylene/isoprene copolymers having bromine contents of from 0.1 to 10 wt.% based on 100 wt.% of said brominated isobutylene/isoprene copolymer, chlorinated isobutylene/isoprene copolymers having chlorine contents of from 0.1 to 10 wt.% based on 100 wt.% of said chlorinated isobutylene/isoprene copolymer, hydrogenated or partially hydrogenated nitrile rubber, styrene/butadiene/acrylonitrile rubber, polychloroprene, epoxidized natural rubber or mixtures thereof, carboxylated nitrile rubbers and carboxylated styrene/butadiene copolymers.

7. (Previously Presented) Rubber mixtures according to Claim 1, wherein said crosslinked rubber particles (B) include those which have been obtained by crosslinking of the following rubbers: polybutadiene, butadiene/acrylic acid C₁₋₄-alkyl ester copolymers, polyisoprene, styrene/butadiene copolymers having styrene contents of from 1 to 60 wt.%, based on 100 wt.% of the styrene/butadiene copolymer, carboxylated styrene/butadiene copolymers, fluorine rubber, acrylate rubber, polybutadiene/acrylonitrile copolymers having acrylonitrile contents of from 5 to 60 wt.% based on 100 wt.% of the polybutadiene/acrylonitrile copolymer, carboxylated nitrile rubbers, polychloroprene, isobutylene/isoprene copolymers having isoprene contents of from 0.5 to 10 wt.% based on 100 wt.% of the isobutylene/isoprene copolymers, brominated isobutylene/isoprene copolymers having bromine contents of from 0.1 to 10

wt.% based on 100 wt.% of the brominated isobutylene/isoprene copolymers, chlorinated isobutylene/isoprene copolymers having chlorine contents of from 0.1 to 10 wt.% based on 100 wt.% of the chlorinated isobutylene/isoprene copolymers, partially and completely hydrogenated nitrile rubbers, ethylene/propylene/diene copolymers, ethylene/acrylate copolymers, ethylene/vinyl acetate copolymers, epichlorohydrin rubbers, silicone rubbers, polyester urethane polymers and polyether urethane polymers.

8. (Previously Presented) A rubber vulcanate comprising rubber mixtures, which comprise uncrosslinked, double-bond-containing rubbers (A), crosslinked rubber particles (B), multifunctional isocyanates (C), and a vulcanizing agent wherein the amount of component (B) in the mixture is from 1 to 150 parts by weight and the amount of multifunctional isocyanates (C) is from 1 to 100 parts by weight, in each case based on 100 parts by weight (phr) of the rubber component (A) and wherein said crosslinked rubber particles (B) have particle diameters of from 5 to 1000 nm and swelling indices in toluene of from 1 to 15 and wherein the gel content of the rubber particles (B) is from 80 to 100 wt.%.

9. (Previously Presented) Molded rubber bodies comprising rubber mixtures, which comprise uncrosslinked, double-bond-containing rubbers (A), crosslinked rubber particles (B), multifunctional isocyanates (C), and a vulcanizing agent wherein the amount of component (B) in the mixture is from 1 to 150 parts by weight and the amount of multifunctional isocyanates (C) is from 1 to 100 parts by weight, in each case based on 100 parts by weight (phr) of the rubber component (A) and wherein said crosslinked rubber particles (B) have particle diameters of from 5 to 1000 nm and swelling indices in toluene of from 1 to 15 and wherein the gel content of the rubber particles (B) is from 80 to 100 wt.%.

10. (Original) A molded rubber body according to Claim 9, wherein said molded rubber body is selected from the group consisting of cable sheaths, hoses, drive

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belts, conveyor belts, roller coverings, tire components, shoe soles, gaskets, damping elements and membranes.

11-14. Cancelled.

15. (Previously Presented) A rubber mixture according to Claim 7, wherein said styrene/butadiene copolymers have styrene contents of from 5 to 50 wt.% based on 100 wt.% of said styrene/butadiene copolymer.

16-19. (Cancelled).

20. (Previously Presented) A rubber mixture according to Claim 1, wherein the crosslinked rubber particle(s) comprises functional groups that are capable of reacting with isocyanates.

21. (Previously Presented) A rubber mixture according to Claim 20, wherein said crosslinked rubber particle(s) has been functionalized with hydroxyl, carboxyl, amino and/or amide groups.